

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Applicants thank the Examiner for acknowledging the IDS of November 12, 2009.

Claims 1-26 were pending. By way of the present Reply, claims 1, 16-17, and 19 are currently amended; claim 18 is cancelled; and the specification has been amended. Claim 16 has been amended to include some of the subject matter of claim 17 and to include the subject matter of claim 18. Claim 19 has been amended to depend from a pending claim because claim 18, from which claim 19 depended, has been cancelled. The specification has been amended to respond to a specification objection.

Claims 1-17 and 19-26 are now pending and submitted for favorable consideration.

Specification Objection

The specification is objected to for informalities. The specification has been amended as appropriate. Favorable consideration and withdrawal of the specification objection is respectfully requested.

Rejection of claims 1-2, 4-10, 16-17, 20, and 22-23 based on Karl 1

Claims 1-2, 4-10, 16-17, 20, and 22-23 are rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Published Application No. 2001/0003311 (“Karl 1”).

A claim is only anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. (*Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See generally M.P.E.P. § 2131). Karl 1 fails to satisfy the requirements of 35 U.S.C. § 102.

Claim 1

Karl 1 fails to disclose, “circulating, in an evaporator, the fluid; and controlling the circuit, such that the intake pressure of the condenser or the compressor at least partially overshoots a saturation pressure in the circuit caused by the ambient temperature, by having a volume of the evaporator smaller than a storage volume of the intermediate store,” as recited in claim 1.

On page 8 of the Office Action, the Office acknowledges that Karl 1 fails to disclose the size of the evaporator and the size of the intermediate store. Accordingly, Karl 1 fails to disclose, “circulating, in an evaporator, the fluid; and controlling the circuit, such that the intake pressure of the condenser or the compressor at least partially overshoots a saturation pressure in the circuit caused by the ambient temperature, by having a volume of the evaporator smaller than a storage volume of the intermediate store,” as recited in claim 1.

Claim 16

Karl 1 fails to disclose, “an evaporator, connected to the circuit, for fluid reception, wherein a volume of the evaporator is smaller than a storage volume of the intermediate store, such that the condenser or the compressor is configured to operate at an intake pressure, that is higher than the saturation pressure in the circuit, caused by the ambient temperature,” as recited in claim 16.

On page 8 of the Office Action, the Office acknowledges that Karl 1 fails to disclose the size of the evaporator and the size of the intermediate store. Accordingly, Karl 1 fails to disclose, “an evaporator, connected to the circuit, for fluid reception, wherein a volume of the evaporator is smaller than a storage volume of the intermediate store, such that the condenser or the compressor is configured to operate at an intake pressure, that is higher than the saturation pressure in the circuit, caused by the ambient temperature,” as recited in claim 1.

* * *

Claims 4-10 depend from independent claim 1 and claims 17, 20, and 22-23 depend from independent claim 16. Claims 4-10, 17, 20, and 22-23 should be allowed at least for the aforementioned reasons and for their additional recitations. Favorable consideration and withdrawal of the 35 U.S.C. § 102 rejection is respectfully requested.

Rejection of claim 3 based on Karl 1 and Hesse

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Karl 1 in view of U.S. Published Application No. 2003/0177778 (“Hesse”). Claim 3 depends from independent claim 1. As previously mentioned, Karl 1 does not disclose the elements of claim 1. Hesse does not cure the deficiencies of Karl 1. Because none of Karl 1 and Hesse disclose the elements of claim 1, claim 1 and dependent claim 3 are allowable. Favorable consideration and withdrawal of the 35 U.S.C. § 103 rejection is respectfully requested.

Rejection of claims 12 and 15 based on Karl 1 and Karl 2

Claims 12 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Karl 1 in view of U.S. Patent No. 5,737,930 (“Karl 2”). Claims 12 and 15 depend from independent claim 1. As previously mentioned, Karl 1 does not disclose the elements of claim 1. Karl 2 does not cure the deficiencies of Karl 1. Because none of Karl 1 and Karl 2 disclose the elements of claim 1, claim 1 and dependent claims 12 and 15 are allowable. Favorable consideration and withdrawal of the 35 U.S.C. § 103 rejection is respectfully requested.

Rejection of claims 11, 13-14, 18-19, 21, and 24-26 based on Karl 1

Claims 11, 13-14, 18-19, 21, and 24-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Karl 1. Claim 18 has been cancelled. The rejection of claim 18 is therefore moot. Claims 1 and 16 have been amended, however, to include subject matter contained in cancelled claim 18.

Claims 11 and 13-14 and claims 19, 21, and 24-26 depend from independent claims 1 and 16 respectively. As previously mentioned, Karl 1 does not disclose the elements of claim 1 or claim 16. Because Karl 1 fails to disclose the elements of claims 1 and 16, claims 1 and 16 and dependent claims 11, 13-14, 19, 21, and 24-26 are allowable.

Additionally, the claims are allowable because Karl 1 fails to disclose, teach, or suggest, “circulating, in an evaporator, the fluid; and controlling the circuit, such that the intake pressure of the condenser or the compressor at least partially overshoots a saturation pressure in the circuit caused by the ambient temperature, by having a volume of the evaporator smaller than a storage volume of the intermediate store,” as recited in claim 1; or “an evaporator, connected to the circuit, for fluid reception, wherein a volume of the evaporator is smaller than a storage volume of the intermediate store, such that the condenser or the compressor is configured to operate at an intake pressure, that is higher than the saturation pressure in the circuit, caused by the ambient temperature,” as recited in claim 16.

On page 8 of the Office Action, the Office acknowledges that Karl 1 fails to disclose the size of the evaporator and the size of the intermediate store. The Office relies on *In re Rose*, to assert that it would have been an obvious matter of design choice to make the evaporator volume smaller than the intermediate storage volume, since such a modification

would have involved a mere change in the size of a component.” Applicants respectfully disagree¹.

The relative size of the evaporator and the intermediate storage volume in claim 1 is not a mere change in size, but rather effects the function of the intake pressure of the condenser. In Applicants’ application, a suction pressure of the condenser is set in such a way that the suction pressure at least partially overshoots a saturation pressure caused by the ambient environment because the volume of the evaporator is smaller than the storage volume of the intermediate storage. In fact, according to one embodiment, the setting of the suction pressure is brought about because the storage or evaporator volume is designed to be so small that the fluid quantity or refrigerant quantity collected or stored in the intermediate store cannot condense completely in the cold evaporator or the intermediate store may have a correspondingly storage volume which is substantially larger than the evaporator volume.

In short, while the size of the package is not identified as important to the invention discussed in *In re Rose*, the size of the evaporator of Applicants’ application, as compared to the storage volume of the intermediate storage, enables the suction pressure of the condenser to be set in such a way that the suction pressure at least partially overshoots a saturation pressure caused by the ambient environment. Accordingly, the modification of Karl 1, as based on *In re Rose*, is improper. The rejection of claims 1 and 16 should be withdrawn.

Favorable consideration and withdrawal of the 35 U.S.C. § 103 rejection is respectfully requested.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

¹ A copy of *In re Rose* is attached to the Reply for the Office’s convenience.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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